

REPLY TO COMMENTS ON MY PROPOSALS RELATING TO THE GENERIC NAME
GARI SCHUMACHER. (Z.N.(S.) 1461)

By L. R. Cox

I have read with interest the comments on my proposals relating to the generic name *Gari* Schumacher and incidental matters. The primary object of my petition was to prevent the automatic emendation of the name *Gari* to the nominative form *Garum*, as required by the existing Rules. It should be noted, therefore, that not one of those who have written about the case has maintained that this emendation should be made; nor has there been any support for the emendation of Gmelin's specific name *fervensis* to *faeroensis* or any of the other three attempted corrections listed on p. 93 of my application. Those who have mentioned this species have acquiesced in the acceptance of the name *fervensis* by using it themselves.

The various comments on my proposals relate to five matters, (a) whether the name *Gari* or its junior subjective synonym *Psammobia* has been the more widely used in the literature; (b) whether the family name should be GARIDAE or PSAMMOBIIDAE if the generic name *Gari* is accepted; (c) the type-species of *Gari*; (d) the identity of *Tellina gari* Linnaeus; (e) the propriety of my selection of a neotype for *Tellina gari*. I will deal with these in turn.

(a) While one or two of those who have written criticising my proposals have maintained that *Gari* should be suppressed on the ground that the use of *Psammobia* has been more widespread, it is evident that they have had the older literature more in mind. The data assembled in the letters of R. Tucker Abbott and H. A. Rehder indicate that *Gari* is the name more widely used by living specialists.

(b) The application for establishment of PSAMMOBIIDAE as the family name was the result of unwilling compliance with the Copenhagen decision that the choice of a family name should be decided by priority even when the generic name on which it is based has been abandoned as a junior synonym. The comments in the various letters received show how strongly workers on Mollusca are opposed to this decision. I should, therefore, like to withdraw the request for the name PSAMMOBIIDAE to be placed on the Official List of Family-Group Names, and to say that I support the alternative proposal that the name GARIDAE should be placed on that list by use of the plenary powers.

(c) Schumacher referred two nominal species to his genus *Gari* and gave the following citation in the synonymy of the first of these, his *Gari vulgaris*:—" *Tellina Gari* Lin. Spengl. l.c.4.H.2. pag.70. No. 1. Chemn. 6, pag. 100 Tab. 10. fig. 92. 93." The tautonymy rule, therefore, fixes *Gari vulgaris* as the type-species of *Gari*, since *Tellina Gari* is included in its synonymy. As I and (I think) most workers would interpret Schumacher, the species *Gari vulgaris* was intended to be identical with *Tellina gari* as understood by Spengler and Chemnitz, the new specific name (*vulgaris*) being assigned to it to avoid the use of the tautonymous binomen *Gari gari*. We must not, however, ignore the fact that Schumacher, besides citing the references mentioned, illustrated in his Pl. IX, figs. 2a, b the interiors of two valves of a shell stated on the plate itself to be *Gari vulgaris*. It has been asserted (Stewart, 1930, *Acad. Nat. Sci. Phila. Spec. Publ.* 3 : 280) that Schumacher's figures "evidently represent *Tellina faeroensis*", that the identity of *Gari vulgaris* should be determined by these figures rather than by the references cited, and therefore that *Tellina fervensis* Gmelin (to use the original spelling of the specific name) must be accepted as type-species of *Gari*. This is the conclusion accepted in R. Tucker Abbott's letter.

In my opinion, however, the specific identity of the two valves figured by Schumacher is far from evident. For specific determination in *Gari*, as in most bivalve genera, it is essential to see the external characters of the shell. Schumacher's figures merely illustrate the interior and are so poor that they do not even show the pallial line. The hinge-teeth which they show are much larger than in specimens of *T. fervensis* which I have examined or in those represented in the figures of Bucquoy, Dautzenberg and Dollfus (1887-98, *Mollusques marins du Roussillon*, pl. 70, figs. 12, 13) cited by Stewart in support of his identification. Schumacher's figures must be dismissed as poor representations, in which the size of the hinge-teeth is much exaggerated, of an indeterminate *Gari*, and the shell illustrated could equally well have belonged to *T. gari* in the sense of Chemnitz as to *T. fervensis*.

Gari vulgaris must, therefore, be interpreted by the relatively good figures of the exteriors of two shells represented in the figures of Chemnitz cited by Schumacher, and, since these two shells are now considered to belong to distinct species, I take the present opportunity to place the interpretation of *Gari vulgaris* on an objective basis by designating one of them, (Chemnitz, 1767, *Conch. Cab.* 6 : pl. 10, fig. 92) as lectotype of this nominal species. This shell, which

Chemnitz stated was in Spengler's collection, belonged to the same species as my proposed neotype of *Tellina gari* Linnaeus (see the synonymy on p. 95 of my application).

(d) In discussing the identity of the original *Tellina gari* of Linnaeus we are faced with the initial difficulty of not knowing if Linnaeus founded this species solely on the basis of the poor figures of Rumphius and Argenville which he cited, or if he founded it on actual specimens and considered that the illustrations of these early authors represented the same species. If the former was the case, it would be necessary to attempt to interpret the species on the basis of the figures, and preferably on that of Rumphius, with whom the name *Tellina gari* had originated. My own inspection of this figure convinced me that the species represented is unidentifiable, but on p. 91 of my application I cited Hanley and Mrs. van Bentham Jutting as respectively identifying it with *Psammotaea serotina* Lamarck and with *Psammotaea violacea* Lamarck. These are regarded as synonymous by some workers, including H. A. Rehder and J. Rosewater, who in their letters consider that the Linnean *T. gari* should be identified with this united species. This, however, is not a satisfactory solution of the problem, as *serotina* and *violacea* are still regarded as distinct by some authorities (e.g. Adam & Leloup, 1939, *Rés. scient. Voyage Indes Orient. Néerland.* 2(20) : 92-93).

The alternative approach was the one I adopted, namely, to assume that Linnaeus was acquainted with his *Tellina gari* and that his Scandinavian contemporary Spengler was in a position to supply Chemnitz with an authoratively identified specimen (the one illustrated in that author's Pl. 10, fig. 92). My conclusion as to the identity of *T. gari* is supported in the letter from R. Tucker Abbott.

(e) Two correspondents have maintained that my proposed designation of a neotype for *Tellina gari* Linnaeus contravenes the regulations governing the establishment of neotypes approved at the Copenhagen Congress. The second of these regulations states that "neotypes are to be designated only in cases in which they are relevant and essential to solving a confused zoological problem, such as the confused identities of closely related species", and this was precisely the reason why I considered that one should be designated in the present instance. The third regulation states that "neotypes are not to be established for nominal species, the names of which are not in general use". If "general use" means use by 100 per cent. of all authors, the specific name *gari* cannot be said to have been in general use, but it has probably been used more frequently for the species to which my proposed neotype belongs than any of the other available names (*truncata* Linn., *vulgaris* Schumacher, *pulchella* Lamarck, and *bipartita* Philippi). J. Rosewater, in his letter, remarks that the most usual name for the species is *caerulescens* Lamarck, but this usage, which originated with Reeve, is now known to be erroneous, Lamarck having applied the name to an entirely different form.

My considered view, after reading the very helpful letters received from various workers by the Secretary of the International Commission, is that the generic name *Gari* Schumacher should be established with the species *Tellina gari* Linnaeus, objectively defined by the proposed neotype, as type-species; *Tellina gari*, thus defined, being a senior synonym of *Gari vulgaris* Schumacher, the nominal type-species of *Gari*, by reason of the designation of a lectotype of *G. vulgaris* made above.